



## **ALBERTA DISTANCE LEARNING CENTRE**

### **MAILING INSTRUCTIONS FOR CORRESPONDENCE ASSIGNMENT BOOKLET**

#### **1. BEFORE MAILING YOUR ASSIGNMENT BOOKLET PLEASE SEE THAT:**

- (1) All assignments are completed. If not, explain why.
- (2) Your work has been re-read to ensure accuracy in spelling and details.
- (3) The booklet cover is filled out and the correct module label is attached.

#### **2. POSTAGE REGULATIONS**

**Do not** enclose letters with Assignments Booklets.

**Send all letters in a separate envelope.**

#### **3. POSTAGE RATES**

**First Class**

**Take your Assignment Booklet to the Post Office and have it weighed. Attach sufficient postage and a green first-class sticker to the front of the envelope, and seal the envelope. Correspondence Assignment Booklets will travel faster if first-class postage is used.**

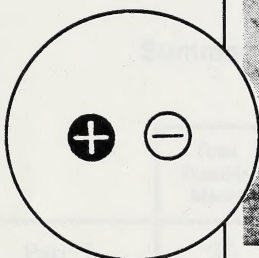
**Try to mail each Assignment Booklet as soon as it has been completed.**

**When you register for correspondence courses, you are expected to send Assignment Booklets for correction regularly. Do not send more than one Assignment Booklet in one subject at the same time.**



**WHOLE NUMBERS  
and INTEGERS  
MODULE 2**

**ASSIGNMENT  
BOOKLET**



# ***MATHEMATICS 7***



**Distance  
Learning**

**Alberta**  
EDUCATION

Mathematics 7  
Assignment Booklet  
Module 2  
Whole Numbers and Integers  
Alberta Distance Learning Centre  
ISBN No. 0-7741-0126-1

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Your mark on this module will be determined by how well you do on this assignment booklet.

This assignment booklet may be completed with the use of a calculator and resource materials. However, you must do the assignment **independently**.

The assignment has three parts.

Part 1 — Multiple-Choice Questions

Part 2 — Short-Answer Questions

Part 3 — Problems

Work slowly and carefully on the assignment. If you are having difficulties, review the appropriate section in your module booklet but do not get help from anyone.

Be sure to proofread each assignment carefully.

Do not hand in this booklet until all questions are answered.

### Faxing?

If you are using a facsimile machine to submit your work, be sure to fill in the information at the bottom of every response page.

### FOR TEACHER'S USE ONLY

#### Summary

	Total Possible Marks	Your Mark
Part 1	30	
Part 2	80	
Part 3	50	
	160	

#### Teacher's Comments

30

**Part 1: Multiple-Choice Questions**

Each of the following questions has four suggested answers: one of which is better than the others. Select the best answer and indicate your choice by writing the letter in the blank on the response page at the right.

2

1. The value of the 2 in the number 673 290 541 is

- a. 200
- b. 20 000
- c. 200 000
- d. 2 000 000

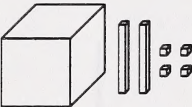
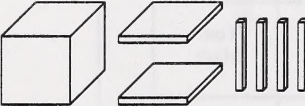
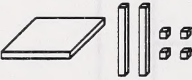
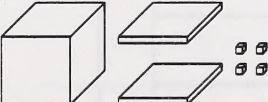
2

2. The number  $(5 \times 10\,000) + (2 \times 1\,000) + (6 \times 100) + (8 \times 1)$  written in standard form is

- a. 52 608
- b. 5 268
- c. 520 068
- d. 52 680

2

3. Form the number 1204 with base 10 blocks. It looks like

- a. 
- b. 
- c. 
- d. 

2

4. The number 30 568 rounded to the nearest thousand is

- a. 31 000
- b. 30 000
- c. 30 600
- d. 31 568

## Part 1 Response Page

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_

Name of School \_\_\_\_\_ Date \_\_\_\_\_



**Part 1 (continued)**

- 2                      5. The correct method of finding the sum of 127 and 51 mentally is
- a.  $(130 + 50) - 3$
  - b.  $(130 + 51) - 1$
  - c.  $(127 + 50) + 1$
  - d.  $(130 + 51) + 3$
- 2                      6. The most accurate estimate of the difference of 710 and 298 is
- a. 300
  - b. 350
  - c. 400
  - d. 500
- 2                      7. The most accurate estimate of the quotient of 43 012 and 591 is
- a. 700
  - b. 80
  - c. 800
  - d. 70
- 2                      8. The value of  $\frac{24 \div 4 + 2}{2 + 1 \times 2}$  is
- a. 1
  - b. 2
  - c. 6
  - d. 8
- 2                      9. 63 is a multiple of
- a. 2
  - b. 4
  - c. 7
  - d. 8
- 2                      10. Which number is a prime number?
- a. 51
  - b. 49
  - c. 20
  - d. 17



# Part 1 Response Page (continued)

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_

Name of School \_\_\_\_\_ Date \_\_\_\_\_

**Part 1 (continued)**

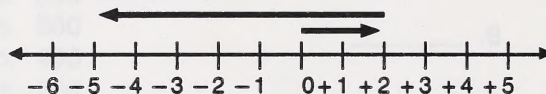
2

11. Which statement is false?

- a.  $-4^{\circ}\text{C}$  is warmer than  $-8^{\circ}\text{C}$
- b.  $0^{\circ}\text{C}$  is colder than  $-5^{\circ}\text{C}$
- c.  $+10^{\circ}\text{C}$  is warmer than  $-2^{\circ}\text{C}$
- d.  $+6^{\circ}\text{C}$  is colder than  $+7^{\circ}\text{C}$

2

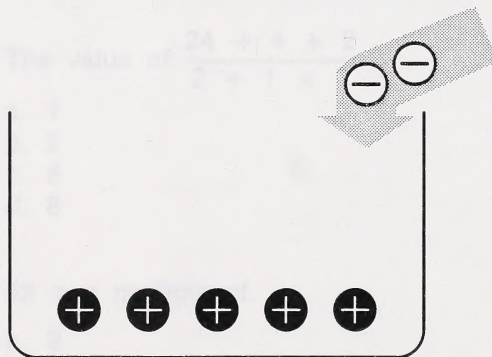
12. Which number sentence is shown by this number line?



- a.  $(-6) + (+8) = +2$
- b.  $(-5) + (+7) = +2$
- c.  $(+2) + (-7) = -5$
- d.  $(-5) + (-7) = +2$

2

13. Which number sentence is shown by this model?



- a.  $(+5) + (-2) = +3$
- b.  $(+5) + (-2) = -3$
- c.  $(+5) + (-2) = +7$
- d.  $(+5) + (-2) = -7$



**Part 1 Response Page (continued)**

11. \_\_\_\_\_

12. \_\_\_\_\_

13. \_\_\_\_\_

Name of Student _____	Student I.D.# _____
Name of School _____	Date _____

**Part 1 (continued)****2**14. The opposite of  $-2$  is

- a.  $-2$
- b.  $+4$
- c.  $+2$
- d.  $0$

**2**

15. Which list shows these numbers in order from smallest to largest?

 $+1, -6, 0, -4, +5$ 

- a.  $-4, -6, 0, +1, +5$
- b.  $0, -4, -6, +1, +5$
- c.  $-6, -4, 0, +1, +5$
- d.  $0, -6, -4, +1, +5$



**Part 1 Response Page (continued)**

14. \_\_\_\_\_

15. \_\_\_\_\_

**Total for Part 1 = \_\_\_\_\_ (maximum possible: 30 marks)**

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_

Name of School \_\_\_\_\_ Date \_\_\_\_\_

**Part 2: Short-Answer Questions**

When answering the following questions show all necessary steps and give complete answers. Put your answers in the spaces provided on the response page.

2

1. Write the number 8 075 620 in expanded notation.

1

2. Write the number forty thousand three hundred ninety-two in standard form.

2

3. Arrange the numbers from least to greatest

834, 384, 843, 583, 1034, 835

4. Calculate the following mentally. Explain how you obtained each answer.

2

a.  $18 + 4 + 2 + 6$

2

b.  $25 \times 17 \times 4$

2

c.  $72\,000 \div 90$

2

d.  $459 + 327$



**Part 2 Response Page**

1.

2.

3.

4. a.

b.

c.

d.

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_

Name of School \_\_\_\_\_ Date \_\_\_\_\_

**Part 2 (continued)**

2                      4. e.  $471 - 239$

2                      f.  $499 \times 5$

5. Write an estimate for each of the following. Explain how you obtained each estimate.

2                      a.  $384 + 791$

2                      b.  $5213 - 879$

2                      c.  $315 \times 87$

2                      d.  $1723 \div 3$



**Part 2 Response Page (continued)**

4. e.

f.

5 a.

b.

c.

d.

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_

Name of School \_\_\_\_\_ Date \_\_\_\_\_

**Part 2 (continued)**

- 4**                      6. Explain the meaning of  $21 \div 3$ . Accompany your explanation with a diagram.
- 2**                      7. Evaluate the following using paper-and-pencil methods. Show your calculations.
- 2**                      a.  $42\,332 + 895 + 3\,706$
- 2**                      b.  $16\,000 - 7\,852$
- 2**                      c.  $592 \times 46$
- 2**                      d.  $211\,188 \div 22$

**Part 2 Response Page (continued)**

6.

7. a.

b.

c.

d.

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_

Name of School \_\_\_\_\_ Date \_\_\_\_\_



**Part 2 (continued)**

8. Use a calculator to find the answer.

1                      a.  $27\,660\,200 + 69\,175\,345$

1                      b.  $2467 \times 381$

9. Round the following to the nearest hundred.

1                      a. 4 378

1                      b. 17 841

1                      c. 953

10. Evaluate the following. Show your work.

2                      a.  $20 - 8 \div 4$

2                      b.  $(8 + 4) \div 12 + 2$

3                      11. Write the first three multiples of 6.

2                      12. Write two common multiples of 8 and 20. Show your work.

**Part 2 Response Page (continued)**

8. a.

b.

9. a.

b.

c.

10. a.

b.

11.

12.

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_

Name of School \_\_\_\_\_ Date \_\_\_\_\_

**Part 2 (continued)**

- 3**                      13. List all the factors of 12 and use diagrams to show the factors.
- 3**                      14. Find the common factors of 45 and 60. Show your work.
- 2**                      15. Is 33 a prime number? Why or why not?
- 2**                      16. Construct a factor tree to show the prime factorization of 42.



**Part 2 Response Page (continued)**

13.

14.

15.

16.

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_

Name of School \_\_\_\_\_ Date \_\_\_\_\_

**Part 2 (continued)**

17. Is the number 619 320 divisible by the following? Explain why or why not without calculating.

1 a. 2

1 b. 3

1 c. 4

1 d. 5

2 18.  = 5

Use diagrams to show  $5^2$  and  $5^3$ .

2 19. Evaluate  $3^4$ .

2 20. Write 1000 as a power.

**Part 2 Response Page (continued)**

17. a.

b.

c.

d.

18.

19.

20.

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_

Name of School \_\_\_\_\_ Date \_\_\_\_\_



## Part 2 (continued)

- 1 21. Write the number which is the opposite of  $-7$ .
- 2 22. Write the numbers below in order from greatest to least.  
 $+1, -3, 0, -4, +3$
- 2 23. Find the sum using counters.
- 2 a.  $(-3) + (+8)$
- 2 b.  $(-10) + (-6)$
- 2 c.  $(+2) + (+7)$

**Part 2 Response Page (continued)**

21.

22.

23. a.

b.

c.

**Total for Part 2 = \_\_\_\_\_ (maximum possible: 80 marks)**

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_

Name of School \_\_\_\_\_ Date \_\_\_\_\_

50

Part 3: Problems

When answering the following questions, show your work and give the answers in sentences.

1. A hockey player is reported to be making a “six-digit” yearly salary. Write, in standard form, the smallest possible amount of money the player would make in a year.

2. Use brackets to make the following a true statement.

54 - 36 ÷ 6 + 3 = 6

3. Fill in the missing numbers.

a.      

	3	
+	6	
1	3	1

b.      

	6	9
×	3	
1		8
8		7
9	9	5
		3

4. An “Orchids of the Americas” show was organized in Edmonton. The chart gives the number of orchids shown by the participating countries.

	Country	Number of Species
North America	Canada	48
	United States	105
	Mexico	66
Central America	Guatemala	60
	Costa Rica	71
South America	Venezuela	97
	Brazil	124

2. a. How many orchids came from Central America?
2. b. How many more orchids were from Brazil than from Mexico?
3. c. Were more orchids shown by the combined North American countries or by the combined South American countries? How many more?

**Part 3 Response Page**

1.

2.

3. a.

$$\begin{array}{r} \square 3 \square \\ + 6 \square 4 \\ \hline 131 \square \end{array}$$

b.

$$\begin{array}{r} \square 69 \\ \times \quad 3 \square \\ \hline 1 \square 83 \\ 8 \square 7 \\ \hline 9953 \end{array}$$

4 a.

b.

c.

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_  
Name of School \_\_\_\_\_ Date \_\_\_\_\_



**Part 3 (continued)**

- 3 5. At an art show, there are 38 display boards for paintings.
- 3 a. If 6 paintings are put on each board, how many paintings can be displayed?
- 3 b. The show has 190 paintings, and all the display boards are used. How many paintings are on each board?
- 3 6. A golf ball factory made 26 875 golf balls in one week. **Estimate** how many packages of 3 balls each were made. (Tell how you got your estimation.)

**Note:** Use a calculator for Question 7. Do not write the calculations.

7. One week a newspaper sold the following numbers of copies:

Monday	75 218
Tuesday	72 560
Wednesday	73 704
Thursday	74 196
Friday	75 010
Saturday	77 452
Sunday	76 335

- 3 a. Find the total number of copies sold that week.
- 3 b. Use the total number sold in the week to predict how many copies might be sold in a year if 1 year = 52 weeks.
- 3 8. **Make up** a problem for which the following statement is the answer.
- There are 1200 seats in the theatre. (Use a calculator to help if you wish.)
- 3 9. What 3 numbers have these characteristics?
- 3 is a factor
  - 4 is not a factor
  - 60 is a multiple

**Part 3 Response Page (continued)**

5. a.

b.

6.

7. a.

b.

8.

9.

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_

Name of School \_\_\_\_\_ Date \_\_\_\_\_

**Part 3 (continued)**

- 2                      10. Find the smallest whole number which gives a remainder of 1 when divided by 3, 5, and 7.
- 3                      11. Robbie's 2 pet yoogleenoids are reproducing in an **exponential** way. That is, on day 1 there are  $2^1$  yoogleenoids, on day 2 there are  $2^2$  yoogleenoids, on day 3 there are  $2^3$  yoogleenoids, and so on. In how many days, counting day 1, will Robbie have at least 1000 yoogleenoids?
- 3                      12. Find a prime number which is the sum of two composite numbers. Write the composite numbers as well as the prime number.
- 3                      13. The temperature at 7 a.m. was  $-10^{\circ}\text{C}$ . By noon the temperature had risen  $+6^{\circ}\text{C}$ . What was the temperature at noon?

**Part 3 Response Page (continued)**

10.

11.

12.

13.

**Total for Part 3 = \_\_\_\_\_ (maximum possible: 50 marks)**

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_

Name of School \_\_\_\_\_ Date \_\_\_\_\_





# Alberta Distance Learning Centre Declarations

The Student's Declaration is to be filled in by a student registered at the Alberta Distance Learning Centre. If the student is under 16, the Learning Facilitator's Declaration is to be filled in by the learning facilitator. Failure to complete this page may invalidate the assignment results.

## Student's Declaration

- I have followed the instructions outlined in the module booklet.
- I have done the activities to prepare myself for the assignments in this assignment booklet.
- I have done these assignments in the assignment booklet by myself.

\_\_\_\_\_  
Student's Signature

## Learning Facilitator's Declaration

I hereby certify that I have supervised the learning activities done by \_\_\_\_\_  
(state student's name)

I also certify that to the best of my knowledge these assignments in this assignment booklet were done independently by this student.

\_\_\_\_\_  
Learning Facilitator's Signature

If either the learning facilitator or the student have any comments or observations regarding this module, write them below.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name of Student \_\_\_\_\_ Student I.D.# \_\_\_\_\_  
Course Name \_\_\_\_\_ Date \_\_\_\_\_



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Mathematics 7

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